

CLAIMS

What is claimed is:

1. A mobile telephone relaying system for relaying communication signals between mobile telephone capable of wireless communication with a wireless mobile telephone communication system and a wired telephone in a wired local telephone network providing communication between the wired telephone and a wired telephone communication system, the wired telephone network employing communication signals having a first format and the mobile telephone communication signals having a second format, comprising:
 - a relaying unit coupled to the wired local telephone network for relaying communication signals between the mobile telephone and the wired local telephone network for communication with the wired telephone;wherein the relaying unit converts communication signals received from the mobile telephone from the second format to the first format for transmission to the wired local telephone network and converts communication signals received from the wired local telephone network by the wired telephone from the first format to the second format for transmission to the mobile telephone.
2. The mobile telephone relaying system as claimed in claim 1, wherein the first format comprises at least a first voltage and the second format comprises at least a second voltage.
3. The mobile telephone relaying system as claimed in claim 2, wherein the first voltage is higher than the second voltage.
4. The mobile telephone relaying system as claimed in claim 3, wherein the

relaying unit provides electrical power for powering the wired telephone.

5. The mobile telephone relaying system as claimed in claim 1, wherein the relaying unit detects connection of the mobile telephone to the relaying unit and thereafter causes communication with the wired telephone to be provided through the wireless mobile telephone system via the wireless telephone.

6. The mobile telephone relaying system as claimed in claim 5, wherein the relaying unit causes the wired telephone network to be disconnected from the wired telephone communication system.

7. The mobile telephone relaying system as claimed in claim 1, wherein the relaying unit comprises a signal converter for converting communication signals having the second format to the first format and communication signals having the first format to the second format.

8. The mobile telephone relaying system as claimed in claim 7, wherein the signal converter comprises at least one of a digital to analog converter and an analog to digital converter.

9. The mobile telephone relaying system as claimed in claim 7, wherein the relaying unit further comprises a noise filter for filtering noise from communication signals having the first format.

10. The mobile telephone relaying system as claimed in claim 7, wherein the relaying unit further comprises a switch for switching between communication via the wired telephone communication system and the wireless mobile communication system.

11. The mobile telephone relaying system as claimed in claim 1, further

comprises a cradle assembly for receiving the mobile telephone, the relaying unit being provided by the cradle assembly.

12. The mobile telephone relaying system as claimed in claim 1, wherein the relaying unit is powered by the wired telephone communication system via the wired local telephone network.

13. A mobile telephone relaying system for relaying communication signals between a mobile telephone capable of wireless communication with a wireless mobile telephone communication system and a wired telephone in a wired local telephone network providing communication between the wired telephone and a wired telephone communication system, the wired telephone network employing communication signals having a first format and the mobile telephone communication signals having a second format, comprising:

- a relaying unit coupled to the wired local telephone network for relaying communication signals between the mobile telephone and the wired local telephone network for communication with the wired telephone; and
- a mobile telephone coupling unit for interconnecting the mobile telephone to the relaying unit for transmission of communication signals having the second format between the relaying unit and the mobile telephone,

wherein the relaying unit converts communication signals received from the mobile telephone coupling unit from the second format to the first format for transmission to the wired local telephone network and converts communication signals received to the wired local telephone network from the first format to the second format for transmission to the mobile telephone via the mobile telephone coupling unit for allowing communication via wireless telephone network using the wired telephone.

14. The mobile telephone relaying system as claimed in claim 13, wherein the

first format comprises at least a first voltage and the second format comprises at least a second voltage.

15. The mobile telephone relaying system as claimed in claim 14, wherein the first voltage is higher than the second voltage.

16. The mobile telephone relaying system as claimed in claim 15, wherein the relaying unit provides electrical power for powering the wired telephone.

17. The mobile telephone relaying system as claimed in claim 13, wherein one of the mobile telephone coupling unit and the relaying unit detects connection of the mobile telephone to the mobile telephone coupling unit and thereafter causes communication with the wired telephone to be provided through the wireless mobile telephone system via the wireless telephone.

18. The mobile telephone relaying system as claimed in claim 17, wherein the relaying unit causes the wired telephone network to be disconnected from the wired telephone communication system.

19. The mobile telephone relaying system as claimed in claim 13, wherein the relaying unit comprises a signal converter for converting communication signals having the second format to the first format and communication signals having the first format to the second format.

20. The mobile telephone relaying system as claimed in claim 19, wherein the relaying unit further comprises a noise filter for filtering noise from communication signals having the first format.

21. The mobile telephone relaying system as claimed in claim 13, further

comprises a cradle assembly for receiving the mobile telephone, the mobile telephone coupling unit being provided by the cradle assembly.

22. The mobile telephone relaying system as claimed in claim 21, wherein the relaying unit is provided by the cradle assembly.

23. The mobile telephone relaying system as claimed in claim 13, wherein the relaying unit is powered by the wired telephone communication system via the wired local telephone network.

24. A mobile telephone relaying system for relaying communication signals between a mobile telephone capable of wireless communication with a wireless mobile telephone communication system and a wired telephone in a wired local telephone network the wired local telephone network for providing communication between the wired telephone and a wired telephone communication system, the wired telephone network employing communication signals having a first format and the mobile telephone transmitting communication signals having a second format to the mobile telephone coupling unit, comprising:

means, coupled to the wired local telephone network, for relaying communication signals between the mobile telephone and the wired local telephone network; and

means for interconnecting the mobile telephone to the relaying means,

wherein the relaying means converts communication signals transmitted to the interconnecting means by the mobile telephone from the second format to the first format and converts communication signals transmitted to the wired local telephone network by the wired telephone from the first format to the second format for allowing communication via wireless telephone network using the wired telephone.

25. A method for relaying communication signals between a mobile telephone capable of wireless communication with a wireless mobile telephone communication system and a wired telephone in a wired local telephone network providing communication between the wired telephone and a wired telephone communication system, the wired telephone network employing communication signals having a first format the mobile telephone communication signals having a second format, comprising:

coupling the mobile telephone to a mobile telephone coupling unit for interconnecting the mobile telephone to a relaying unit for transmission of communication signals having the second format between the relaying unit and the mobile telephone; and

relaying communication signals between the mobile telephone and the wired local telephone network via the relaying unit for communication with the wired telephone,

wherein the relaying unit converts communication signals transmitted to the mobile telephone coupling unit by the mobile telephone from the second format to the first format for transmission to the wired local telephone network and converts communication signals transmitted to the wired local telephone network by the wired telephone from the first format to the second format for transmission to the mobile telephone for allowing communication via the wired telephone using the wireless telephone network.

26. The method as claimed in claim 25, wherein the first format comprises at least a first voltage and the second format comprises at least a second voltage.

27. The method as claimed in claim 26, wherein the first voltage is higher than the second voltage.

28. The method as claimed in claim 25, further comprising detecting

connection of the mobile telephone to the mobile telephone coupling unit and thereafter causing communication with the wired telephone to be provided through the wireless mobile telephone system via the wireless telephone.

29. The method as claimed in claim 28, further comprising causing the wired telephone network to be disconnected from the wired telephone communication system.

30. The mobile telephone relaying system as claimed in claim 13, wherein the step of coupling the mobile telephone to the mobile telephone coupling unit comprises placing the mobile telephone in a cradle assembly.

31. A mobile telephone relaying unit for relaying communication signals between mobile telephone capable of wireless communication with a wireless mobile telephone communication system and a wired telephone in a wired local telephone network providing communication between the wired telephone and a wired telephone communication system, the wired telephone network employing communication signals having a first format and the mobile telephone communication signals having a second format, comprising:

- a signal converter for relaying communication signals between the mobile telephone and the wired local telephone network for communication with the wired telephone; and

- a switching assembly for detecting connection of the mobile telephone to the mobile telephone coupling unit and thereafter causing communication with the wired telephone to be provided through the wireless mobile telephone system via the wireless telephone,

wherein the signal converter converts communication signals received from the mobile telephone from the second format to the first format for transmission to the wired local telephone network and converts communication signals received the wired local telephone network by the

wired telephone from the first format to the second format for transmission to the mobile telephone.

32. The mobile telephone relaying unit as claimed in claim 31, wherein the first format comprises at least a first voltage and the second format comprises at least a second voltage.

33. The mobile telephone relaying unit as claimed in claim 32, wherein the first voltage is higher than the second voltage.

34. The mobile telephone relaying unit as claimed in claim 31, wherein the switching assembly causes the wired telephone network to be disconnected from the wired telephone communication system.

35. The mobile telephone relaying unit as claimed in claim 31, further comprising a cradle assembly for receiving the mobile telephone.

36. The mobile telephone relaying unit as claimed in claim 31, further comprising a noise filter for filtering noise from communication signals having the first format.

37. A method for routing an incoming phone call, comprising:
receiving a phone call by a mobile phone; and
routing said phone call to a second phone via a mobile phone relaying device.

38. The method of claim 37, wherein said second phone is selected from a group consisting of a regular phone, a cordless phone, a cell phone, a satellite phone, and an Internet phone.

39. The method of claim 37, wherein said mobile phone is a cell phone.
40. The method of claim 37, wherein said mobile phone relaying device is at a user's end.
41. The method of claim 37, further comprising answering said phone call from said second phone.
42. A method for routing an outgoing phone call, comprising:
receiving a phone call by a first phone; and
routing said phone call to a mobile phone via a mobile phone relaying device.
43. The method of claim 42, wherein said first phone is selected from a group consisting of a regular phone, a cordless phone, a cell phone, a satellite phone, and an Internet phone.
44. The method of claim 42, wherein said mobile phone is a cell phone.
45. The method of claim 42, wherein said mobile phone relaying device is at a user's end.
46. The method of claim 42, further comprising sending said phone call away along a mobile phone route.
47. A telephone network, comprising:
a mobile phone; and

a second phone communicatively coupled to said mobile phone via a mobile phone relaying device, said mobile phone relaying device being at a user's end,

wherein said mobile phone relaying device routes a phone call between said mobile phone and said second phone.

48. The telephone network of claim 47, wherein said second phone is selected from a group consisting of a regular phone, a cordless phone, a cell phone, a satellite phone, and an Internet phone.

49. The telephone network of claim 47, wherein said mobile phone relaying device is part of said mobile phone.

50. The telephone network of claim 47, wherein said mobile phone relaying device is part of said second phone.

51. The telephone network of claim 47, wherein said mobile phone relaying device is a stand alone product.

52. The telephone network of claim 47, wherein said mobile phone is a cell phone.

53. The telephone network of claim 52, wherein said mobile phone relaying device is part of a charger cradle assembly so that when said cell phone is placed on said charger cradle assembly to be charged, an incoming phone call to said cell phone is routed to said second phone.